

IMAGE REJECT FILTERING IN A DIRECT SAMPLING MIXER

ABSTRACT

[040] Disclosed are methods, circuits and systems for image reject filtering in a multi-tap direct sampling mixer (MTDSM) of an IF or RF system. Disclosed is the use of rotating capacitors among the in-phase and quadrature branches of a signal processing system. The exchange of information among the branches of the I and Q channels is used in the implementation of a complex filter. Embodiments using cascaded multiple stages of the complex filter to provide higher order complex filters are also disclosed.